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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,332	01/25/2002	Yoav Kotser	6727/1K235US1	1518

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11/14/2005

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EXAMINER

SERRAO, RANODHI N

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/057,332

Applicant(s)

KOTSER, YOAV

Examiner

Ranodhi Serrao

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 25 October 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1,2,5-9,11-15,18-22 and 24-26.
Claim(s) withdrawn from consideration: 3,4,10,16,17 and 23.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
13. ☐ Other: _____

DETAILED ACTION

1. The examiner has entered the after final amendments filed on 25 October 2005.

See below.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1, 2, 5-9, 11-15, 18-22, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,339,595 to Rekhter et al. ("Rek") and U.S. Patent No. 6,304,575 to Carroll et al. ("Car").
4. As per claim 1, Rek teaches a method for controlling a system of label-switched tunnels through a communication network (column 35, lines 7-15), the method comprising: pushing a signaling label onto a signaling frame at a first node in the network (column 22, lines 41-49); sending the signaling frame through the label-switched tunnels to one or more recipient nodes in the network (column 7, lines 23-49); popping the signaling label off the signaling frame at the one or more recipient nodes (column 21, lines 24-30); and responsive to the signaling label, processing the signaling frame at the one or more recipient nodes so as to eliminate loops formed by the label-switched tunnels (column 24, lines 51-57), wherein pushing the signaling label comprises inserting an agreed-upon value in the signaling label indicating that the signaling frame belongs to a protocol for eliminating the loops formed by the label-switched tunnels in a transparent local area network system (TLS) (see Rek, column 2,

lines 8-19, column 10, lines 18-33, and column 38, line 66-column 39, line 10) and wherein popping the signaling label comprises determining that the signaling frame is to be processed in accordance with the protocol responsive to the agreed-upon value in the signaling label (see Rek, column 10, lines 40-62). But fails to teach a method of generating a signaling frame in accordance with a spanning tree protocol (STP) in a layer 2 transparent local area network system (TLS). However, Car teaches a method of generating a signaling frame in accordance with a spanning tree protocol (STP) in a layer 2 transparent local area network system (TLS) (see Car, col. 3, lines 5-26 and col. 7, line 66-col. 8, line 14 and col. 18, lines 17-39). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Rek to a method of generating a signaling frame in accordance with a spanning tree protocol (STP) in a layer 2 transparent local area network system (TLS) in order to generate loop-free paths in token ring networks (see Car, col. 1, lines 4-7).

5. As per claims 2, 5-9, and 11-13, the above-mentioned motivation of claim 1 applies fully in order to combine Rek and Car.

6. As per claim 2, Rek and Car teach wherein the label-switched tunnels comprise multiprotocol label switching (MPLS) tunnels (see Rek, column 41, lines 28-34).

7. As per claim 5, Rek and Car teach wherein processing the signaling frame comprises setting a transmitting state for each one of the label-switched tunnels (see Rek, column 42, lines 10-17).

8. As per claim 6, Rek and Car teach wherein for at least one of the label-switched tunnels, the transmitting state is set to a blocking state so as to prevent frames from

being sent across the at least one of the label-switched tunnels, in order to eliminate a loop in the TLS (see Rek, column 48, lines 20-34: wherein parameter closing serves the purpose of a blocking state).

9. As per claim 7, Rek and Car teach wherein for at least one of the label-switched tunnels, the transmitting state is an active state so as to allow frames to be sent across the at least one of the label-switched tunnels (see Rek, column 42, lines 10-17).

10. As per claim 8, Rek and Car teach wherein sending the signaling frame comprises sending the signal frame through the label-switched tunnels that are used for carrying user data (see Rek, column 22, lines 50-61).

11. As per claim 9, Rek and Car teach wherein the label-switched tunnels are arranged to provide a virtual bridge service for carrying the user data (see Rek, column 22, lines 18-31 and lines 50-61).

12. As per claim 11, Rek and Car teach wherein the TLS is one of a plurality of transparent local-area network services (TLSs) operative in the communication network (see Rek, column 1, line 58-column 2, line 7), and wherein pushing the signaling label comprises pushing information identifying the signaling frame with one of the plurality of TLSs (see Rek, column 38, lines 6-12), and wherein eliminating the loops comprises eliminating the loops from the one of the plurality of TLSs that corresponds to the signaling frame (see Rek, column 24, lines 51-57).

13. As per claim 12, Rek and Car teach wherein pushing the information identifying the signaling frame comprises pushing a channel label onto the signaling frame along with the signaling label (see Rek, column 16, line 53-column 17, line 4), and wherein

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popping the signaling label comprises additionally popping the channel label off the signaling frame (see Rek, column 22, lines 50-61), and wherein processing the signaling frame comprises processing the channel label together with the signaling frame (see Rek, column 36, lines 53-65).

14. As per claim 13, Rek and Car teach wherein pushing the information identifying the signaling frame comprises adding the information to the signaling label, and wherein processing the signaling frame comprises processing the information identifying the signaling frame from the signaling label together with the signaling frame (see Rek, column 36, lines 53-65).

15. As per claim 14, Rek teaches a communication device for operation as one of a plurality of nodes in a communication network (column 16, line 53-column 17, line 4), the device comprising: one or more ports, adapted to send and receive traffic via label-switched tunnels through the communication network (column 14, line 65-column 15, line 12 and column 22, lines 50-61); and a traffic processor which is coupled to the one or more ports, and is adapted to carry out a protocol for eliminating loops formed by the label-switched tunnels (column 24, lines 51-57), by pushing a signaling label onto a signaling frame and sending the signaling frame through at least one of the ports via the label-switched tunnels to one or more recipient nodes in the network (column 7, lines 23-49 and column 22, lines 41-49), causing the recipient nodes to pop the signaling label off the signaling frame and responsive to the signaling label, to process the signaling frame so as to eliminate the loops formed by the label-switched tunnels (column 21, lines 24-30), wherein the traffic processor is adapted to insert an agreed-

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upon value in the signaling label (see Rek, column 2, lines 8-19, column 10, lines 18-33, and column 38, line 66-column 39, line 10), and wherein the agreed-upon value is recognized by the recipient nodes so as to determine that the signaling frame is to be processed in accordance with the protocol (see Rek, column 10, lines 40-62). But fails to teach a device adapted to send and receive traffic over a layer 2 transparent local area network system (TLS) and adapted to carry out a spanning tree protocol (STP). However, Car teaches a device adapted to send and receive traffic over a layer 2 transparent local area network system (TLS) (see Car, col. 7, line 66-col. 8, line 14) and adapted to carry out a spanning tree protocol (STP) (see Car, col. 3, lines 5-26). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Rek to a device adapted to send and receive traffic over a layer 2 transparent local area network system (TLS) and adapted to carry out a spanning tree protocol (STP) in order to generate loop-free paths in token ring networks (see Car, col. 1, lines 4-7).

16. As per claims 15, 8-22, and 24-26, the above-mentioned motivation of claim 14 applies fully in order to combine Rek and Car.

17. As per claim 15, Rek and Car teach wherein the label-switched tunnels comprise multiprotocol label switching (MPLS) tunnels (see Rek, column 41, lines 28-34).

18. As per claim 18, Rek and Car teach wherein the traffic processor is adapted to set a transmitting state for each one of the label-switched tunnels (see Rek, column 42, lines 10-17).

19. As per claim 19, Rek and Car teach wherein for at least one of the label-switched tunnels, which was found to be part of one of the loops, the transmitting state is set to a blocking state in which frames are prevented from being sent across the at least one of the label-switched tunnels, in order to eliminate a loop in the TLS (see Rek, column 48, lines 20-34: wherein parameter closing serves the purpose of a blocking state).

20. As per claim 20, Rek and Car teach wherein for at least one of the label-switched tunnels, the transmitting state is an active state in which frames are allowed to be sent across the at least one of the label-switched tunnels (see Rek, column 42, lines 10-17).

21. As per claim 21, Rek and Car teach wherein the signaling frame is sent through the label-switched tunnels that are used for carrying user data (see Rek, column 22, lines 50-61).

22. As per claim 22, Rek and Car teach wherein the label-switched tunnels are arranged to provide a virtual bridge service for carrying the user data (see Rek, column 22, lines 50-61 and column 22, lines 18-31).

23. As per claim 24, Rek and Car teach wherein the TLS is one of a plurality of transparent local-area network services (TLSs) operative in the communication network (see Rek, column 1, line 58-column 2, line 7), and wherein the traffic processor is adapted to identify the signaling frame with one of the plurality of TLSs (see Rek, column 38, lines 6-12) so as to eliminate loops from the one of the plurality of TLSs that corresponds to the signaling frame (see Rek, column 24, lines 51-57).

24. As per claim 25, Rek and Car teach wherein the traffic processor is adapted to push a channel label onto the signaling frame containing the information identifying the

signaling frame (see Rek, column 16, line 53-column 17, line 4), and wherein the channel label is popped off the signaling frame by the recipient nodes for use in processing the signaling frame (see Rek, column 22, lines 50-61).


25. As per claim 26, Rek and Car teach wherein the traffic processor is adapted to add the information identifying the one of the plurality of TLSs to the signaling label, and wherein the information is used by the recipient nodes in processing the signaling frame (see Rek, column 36, lines 53-65).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ranodhi Serrao whose telephone number is (571)272-7967. The examiner can normally be reached on 8:00-4:30pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571)272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER